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Vanessa Agredo-Delgado · Pablo H. Ruiz (Eds.)

Human-Computer Interaction

4th Iberoamerican Workshop, HCI-Collab 2018
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Revised Selected Papers

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Preface

The area of human–computer interaction (HCI) has as one of its central problems the insertion of the technological element (computer, handheld devices, etc.) within the social context, with considerable progress having been made in the area, and whose foundations derive from a wide variety of fields: computer science, cognitive psychology, social psychology, perceptive psychology, linguistics, artificial intelligence, and anthropology, among others. Like any research area, HCI has evolved, marking paradigms that govern the construction process of the technological element. These paradigms have allowed for the development of different design approaches, which are known as technology-centered design, in the user and in the apprentice. This knowledge area tells us about the relevance of each of the three elements of the equation: the human being (user), the computer/mobile device (system), and the interaction (information transmission in two ways).

This book contains a compilation of research works on topics related to HCI at the Ibero-American level (Colombia, Argentina, Peru, Mexico, Cuba, Costa Rica, Spain) in specialized areas such as: emotional interfaces, HCI and video games, computational thinking, collaborative systems, software engineering, and ICT in education. We present papers that describe models, design patterns, implementations, evaluations of existing applications, and systemic reviews; all of them very important aspects in HCI. In this way, the book can become a theoretical reference for Ibero-American researchers, spreading knowledge and demonstrating the research quality that is being developed on the subject at the Ibero-American level. This work is the result of the HCI-Collab Network (Collaborative Network to support the teaching–learning processes in the HCI area at the Ibero-American level), whose main objective is to structure a curricular proposal in the HCI area that serves as a model for various Ibero-American institutions that deal with these themes. In this way, the papers presented in this book are the basis for the study of several Ibero-American academic programs on HCI subjects in content terms, objectives, methodologies, resources, and evaluation mechanisms.

All paper submissions were reviewed by three experts. Authors removed personal details, the acknowledgments section, and any references that may disclose the authors' identity. Papers not satisfying these conditions were rejected without reviews. All contributions were written following the Springer template and the first anonymous version was submitted in PDF format.

The call for papers attracted 83 submissions in Spanish, English, and Portuguese; 30 were accepted, with the 22 best papers being invited to send an extended version as a long article in English, of which 18 accepted the invitation and are presented in this book. Reviewing was performed by national and international reviewers. Moreover, the EasyChair system was used for the management and review of submissions.

We are grateful to all authors who sent their articles, to the organizers, and to Springer.

August 2018

Vanessa Agredo-Delgado
Pablo H. Ruiz

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